The Technical Cooperation Program (TTCP)

Concepts Briefing

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Combined Joint Concept

TTCP: *Background*

The Technical Cooperation Program (TTCP)

- Members: US, UK, CAN, AUS, NZ
- Inception: 25 October 1957 (UK and US)
  - As of 1969 (Canada, AUS, New Zealand)
  - Oldest Multi-national partnership
- Purpose: Foster cooperation within S&T areas needed for conventional (non-atomic) defense, reduce costs and share information between countries.
- Scope: Exploration of alternative concepts prior to development of specific weapon systems, collaborative research, sharing of data, equipment, materiel and facilities, joint trials and exercises and ACTDs

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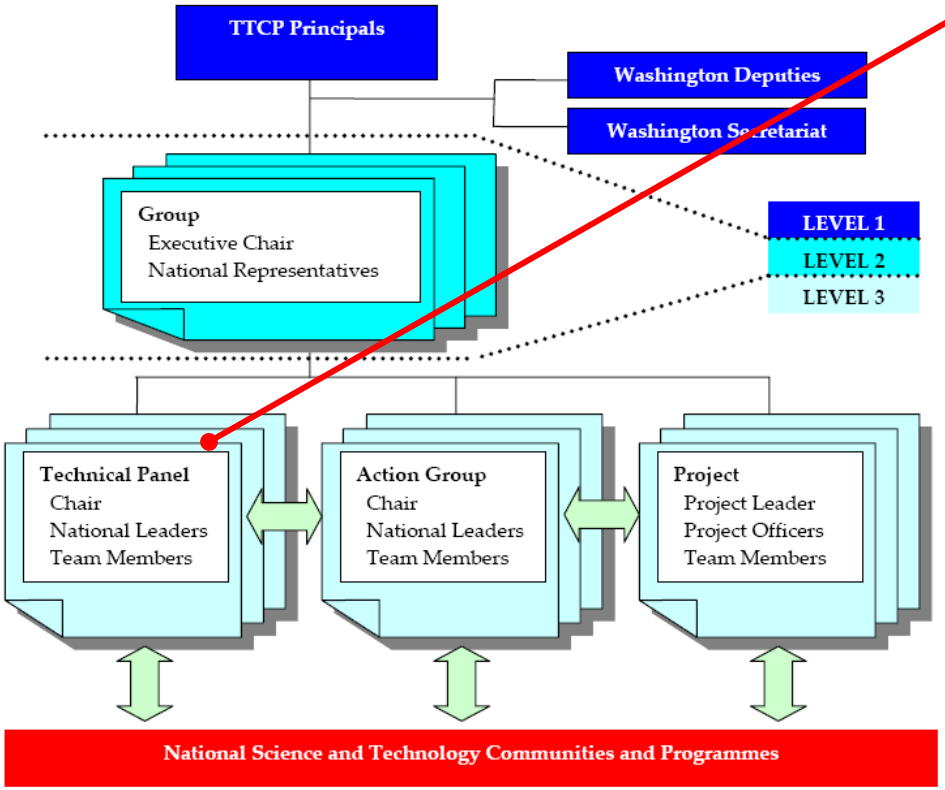
TTCP: *Background*

The Technical Cooperation Program (TTCP)

Organization:



Technical Panel (TP)

The Technical Panel is a subordinate element of a group that operates as a component of TTCP. The TP is authorized to conduct activities in basic research, advanced technology development, and exploratory development and demonstration.

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The Technical Cooperation Program (TTCP)

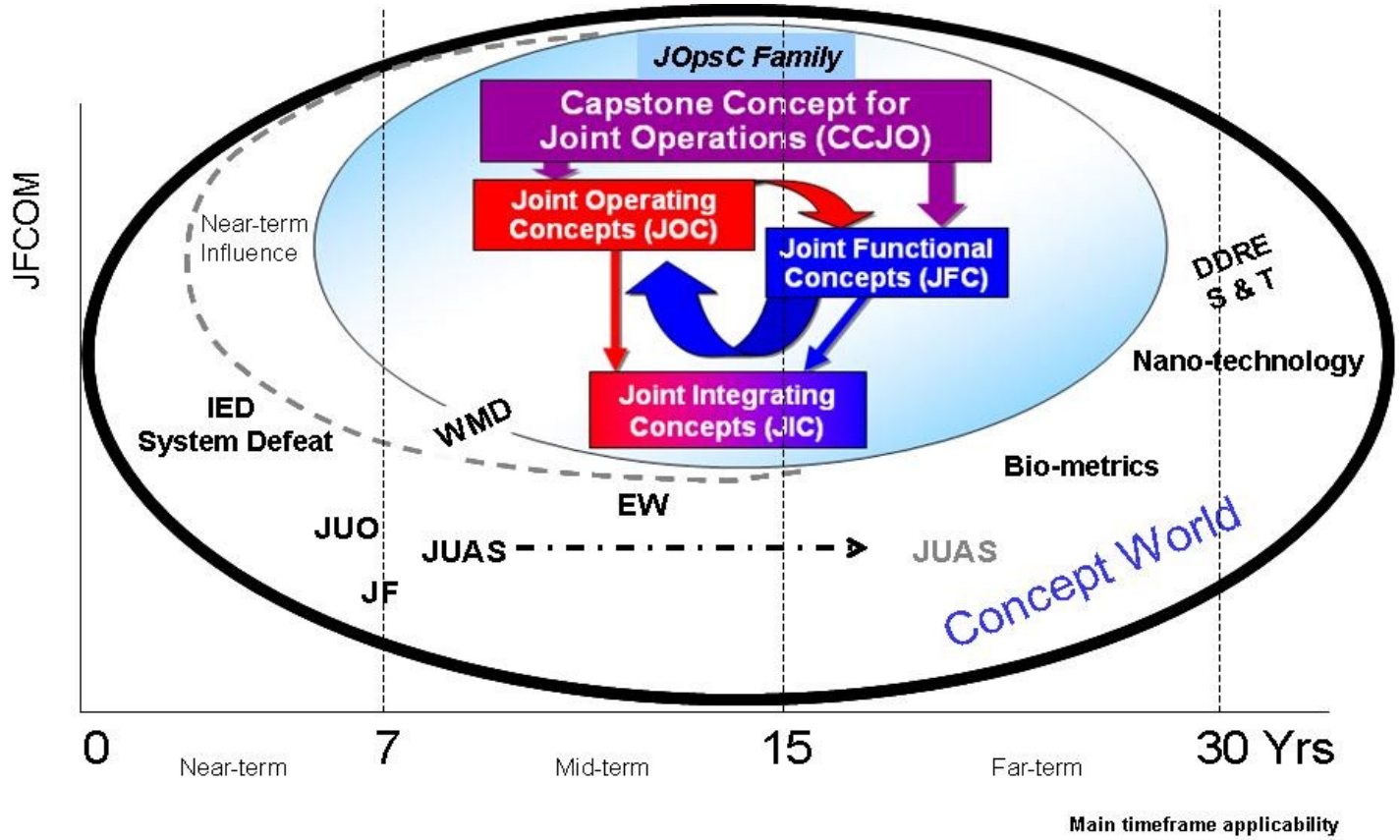
Technical Panel 3, Joint Concepts and Analysis, and Technical Panel 7, Concept Development and Experimentation Sciences, under the *Joint Systems and Analysis Group* met in October 2006 to define and describe the types of concepts for each nation as well as discuss common terminology and propose common ontology.

In depth discussion on how each nation develops their hierarchy of joint concepts.

Combined Joint Concept

United States

- Capstone Concept for Joint Ops
- Joint Operating Concepts (Major Combat Ops, Homeland Defense)
- Joint Functional Concepts (C2, Battlespace Awareness, Joint Logistics)
- Joint Integrating Concepts (Network Centric Operating Environment)



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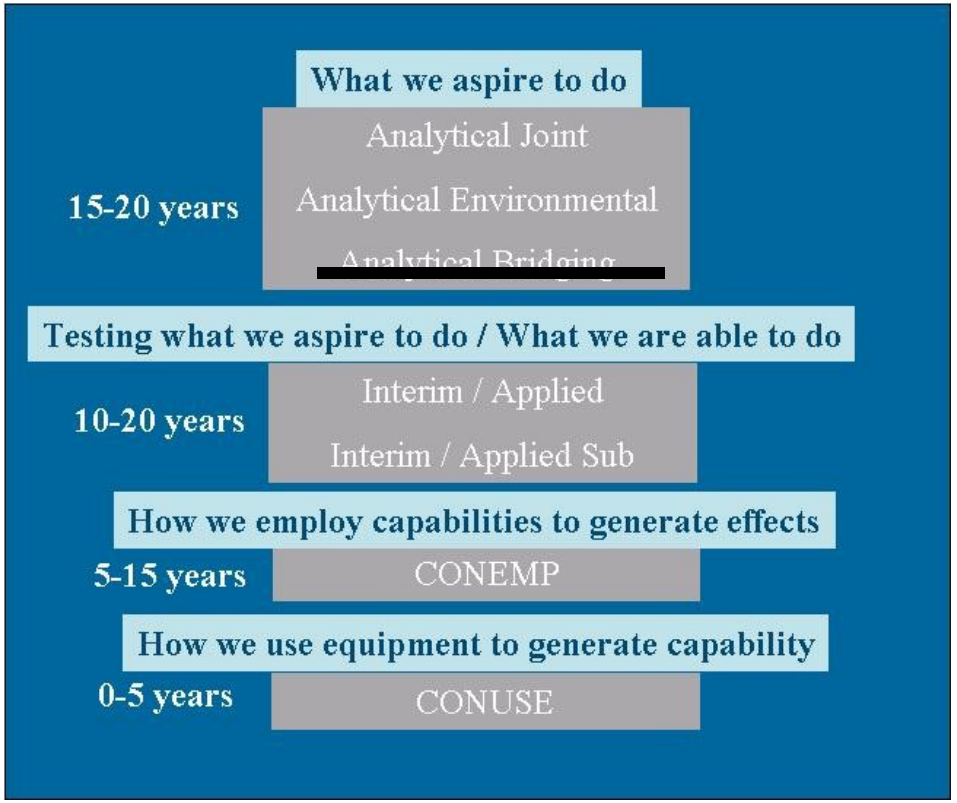
United Kingdom

- Analytical Joint (I.e. HLOC)
  - Analytical Environmental (Future Land Op C)
- Interim/Applied Concepts (operate, project, prepare, sustain)
- Interim/Applied Sub-concepts (Joint influence, joint maneuver)
- ConEmp
- ConUse



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UKs “7 Step Process” for Concept Development

Step 1 – Identify capabilities required to deliver policy

Step 2 – Reconcile capability priorities with situational reality and conceptual thinking

Step 3 – Develop ‘unconstrained’ concepts to meet capability gaps or to improve existing capabilities

Step 4 – Refine and test concepts, apply ‘constraints’

Step 5 – Select and endorse concepts

Step 6 – Acquire capabilities required to deliver concepts

Step 7 – Oversight across lines of development (TEPIDOIL)

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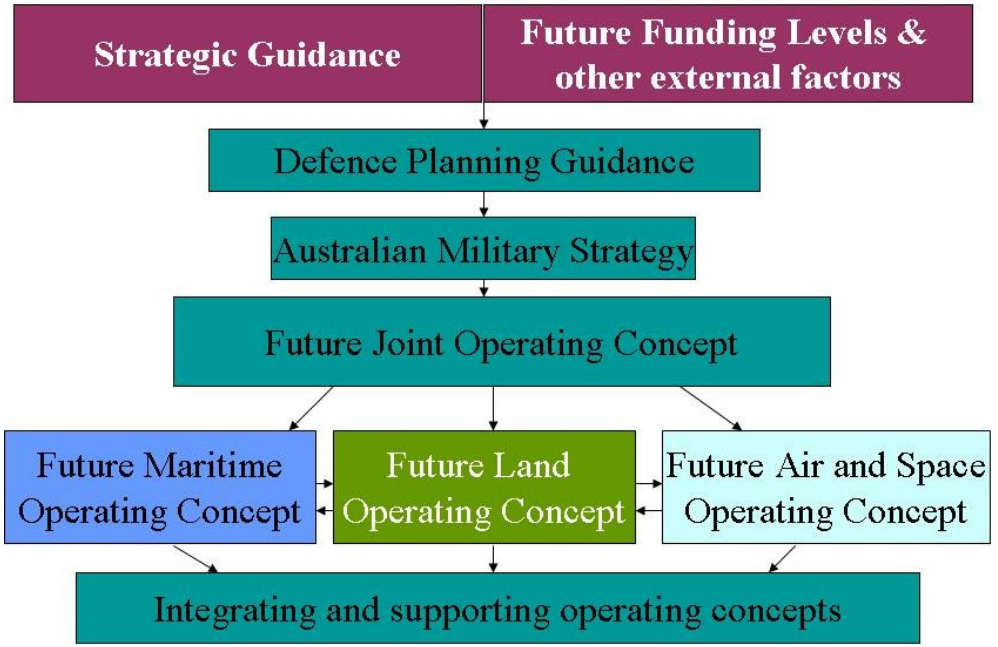
Australia

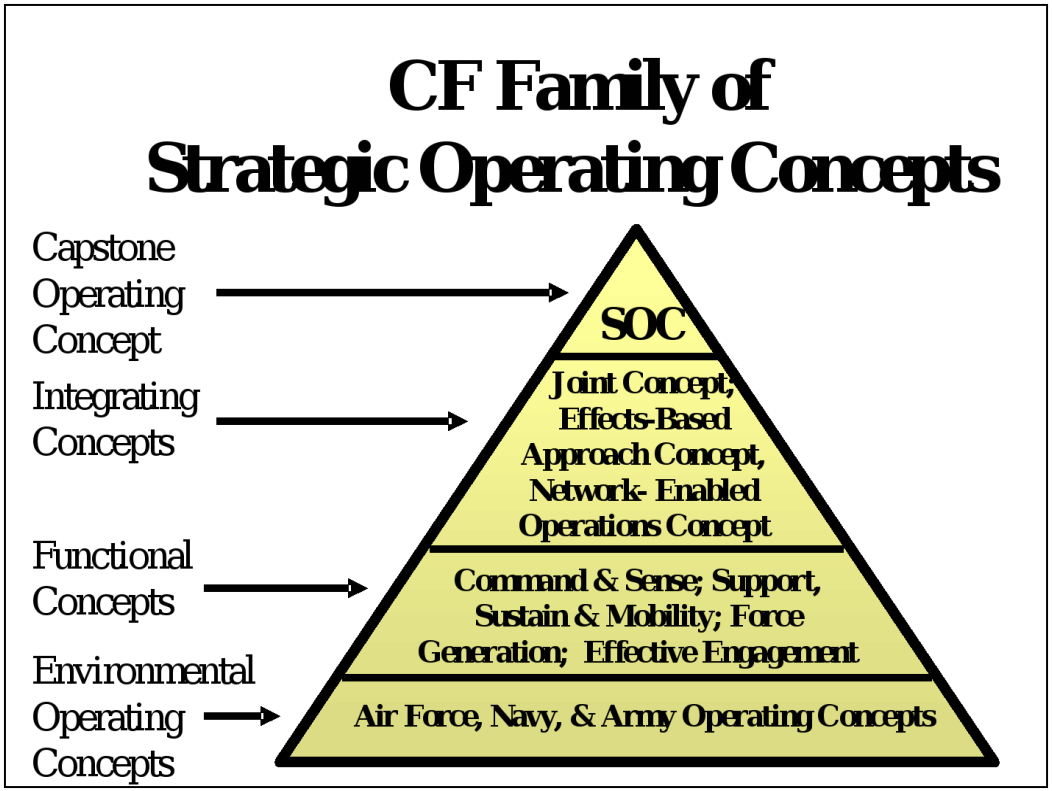
- Australian Military Strategy
- Future Operating Concepts
- Environmental Concepts
- Enabling Concepts (C2, Interoperability)
- Integrating (EBO, NCO)


Strategic Guidance
Future Funding Levels & other external factors
Defence Planning Guidance
Australian Military Strategy
Future Joint Operating Concept
Future Maritime Operating Concept
Future Land Operating Concept
Future Air and Space Operating Concept
Integrating and supporting operating concepts

Combined Joint Concept

Canada

- Capstone Operating Concept
- Integrating Concepts (EBO, NEOps)
- Functional Concepts (C2)
- Environmental Operating Environment


CF Family of
Strategic Operating Concepts
Capstone Operating Concept
Integrating Concepts
Functional Concepts
Environmental Operating Concepts
SOC
Joint Concept; Effects-Based Approach Concept, Network- Enabled Operations Concept
Command & Sense; Support, Sustain & Mobility; Force Generation; Effective Engagement
Air Force, Navy, & Army Operating Concepts

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Concept Matrix

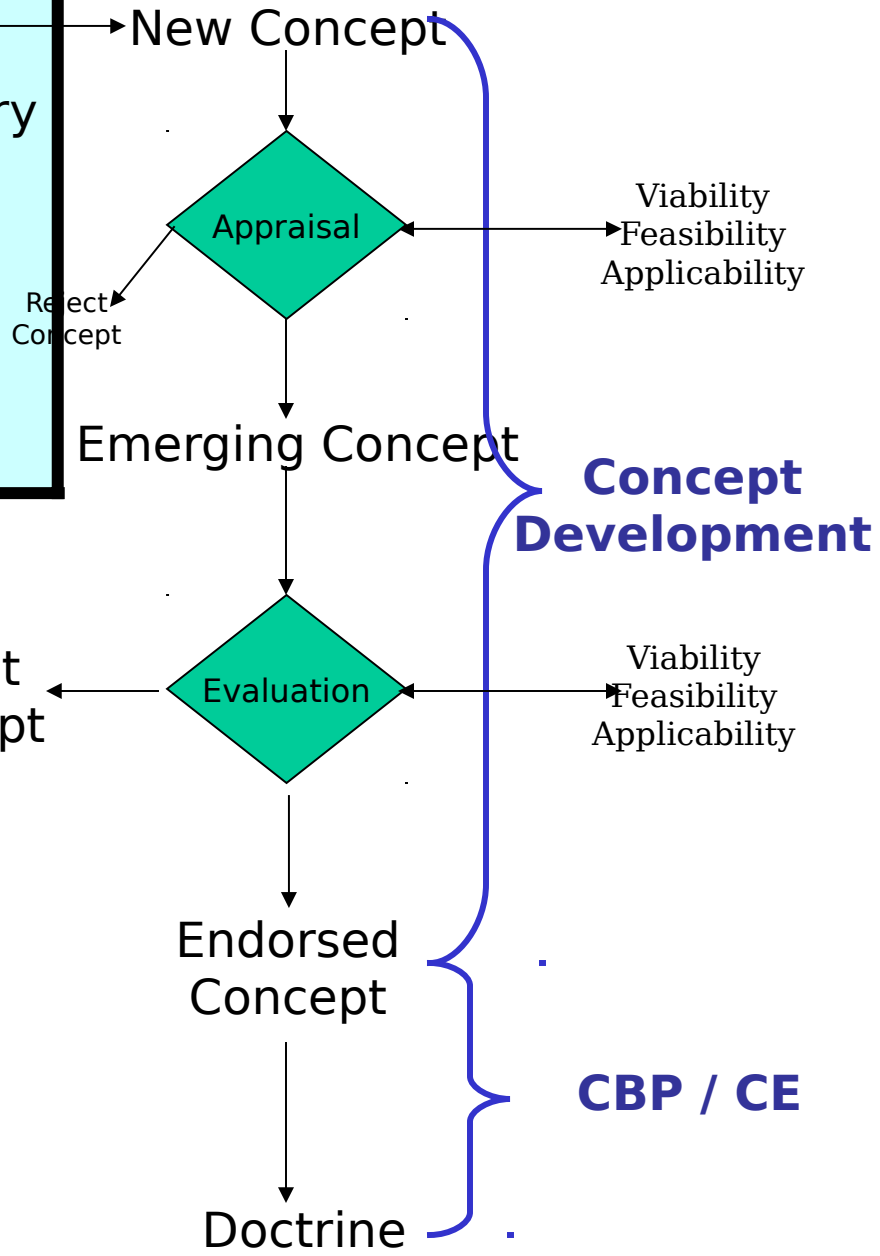
UK	AUS	CA	US	TTCP
Analytical Joint	Joint	Capstone	CCJO	Defence Level
*Military Task Operating Concept	Australian Military Strategy		Joint Operating Concepts	Mission
Analytical Environmental	Environmental	Environmental	* Service Concepts	Environmental
*Hybrid Concepts	Integrating	Integrating	*Joint Concepts	Integrating
Interim Applied	Enabling	Functional	Joint Functional Concepts	Functional and Enabling
Interim Applied Sub-concepts			Joint Integrating	
ConEmp	*ConOps/ ConEmp	*ConOps	*Capability Development Doc	Capability Requirements and Acquisition
ConUse		*ConOps	*Capability Production Doc	

Hierarchy

Top Down Importance – Canada / US
Process – UK
Relationships - AUS

* Not in Hierarchy

- World/Environment
- Business Problems
- Technology Changes or Discovery
- National Culture (Human)
- New Ways of Doing Business
- Leadership / Guidance
- Operational Experience
- Threat
- Identify a solution to a problem



New: Overcome a problem by doing things differently, more efficiently or more effectively or discover something that has not been thought of or done before

New:	Emerging:
Promising	Some measure of support
Potential	Articulated Vision
Innovative	Initial evidence of value
Interesting	Applications identified
Creative	
Value	

TTCP Website

http://www.dtic.mil/ttcp

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